

**INNOVATIVE APPROACH TO CHILLER REPLACEMENT
AT LAFAYETTE GENERAL MEDICAL CENTER
LOCATED IN LAFAYETTE, LOUISIANA**

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ABSTRACT

The Lafayette General Medical Center is a 332-bed, comprehensive regional medical facility. The Main Building was original a 7 story structure built in 1965. Prior to 1983, other than expansion work, there not been no work done on the original central plant or HVAC systems.

In 1983, utilizing a combination of financing methods including U.S. Department of Energy ("DOE") grants, the Hospital initiated a comprehensive Facility Energy, Operations and Utilization Analysis Program. In that time period, the Main Building increased square footage from 284,000 to 463,000, a 63% increase, with a simultaneous reduction in utility costs from \$3.94/SF to \$2.26/SF, or a 43% reduction.

The culmination of the latest phase of the Program, described in this paper, includes the installation of a "hybrid" central system. Since 1983, the Hospital has realized a cumulative savings of \$5.6 million in utility costs.

BACKGROUND OF THE FACILITY

Facility History

The Lafayette General Medical Center complex is a comprehensive regional medical facility located in Lafayette, Louisiana. The complex occupies 820,000 square feet in 13 different buildings and locations. The Main Building, which houses the 24-hour medical operations (332 beds) occupies 463,000 square feet. Although management of the entire complex demands attention, the majority of plant systems and utility consumption is concentrated in its Main Building.

In 1983, the Hospital occupied approximately 274,000 square feet of the Main Building. In 1985, a major expansion of the facility added an 11 story tower to the original building and several floors were left as shells for future expansion.

The electric and natural gas costs in 1983 were running approximately \$3.94 per square foot and the annual BTU per square foot was 754,753. The utility expense for gas and electricity represented 50% of the Maintenance & Operations operating budget. Being a service and non-revenue producing department, they realized the best way to contribute to the bottom line was to reduce expenses. In 1985 utilities were running at \$1.3 million per year. Realizing the opportunity available, the Hospital initiated an aggressive Energy Program.

Energy Program 1985 - 1993

Over the next 8 years, the Hospital's Energy Program incorporated 4 grants from the Department of Energy's Institutional Conservation Program ("ICP"), which along with a Preventive Maintenance Program, is still in place to day. Their Preventive Maintenance Program includes cleaning schedules of equipment components as well as efficiency and/or performance tests for equipment and systems.

One other item that contributed to the Energy Conservation Program was that Maintenance was very active in the planning process for construction and renovation projects. Maintenance is allowed to participate and make recommendations, which has been a big advantage. This allows the correction of certain deficiencies in the plant during construction, as well as ensure that any new equipment being installed will fit in with what is being done in energy conservation.

Past Grant Participation

Lafayette General Medical Center has participated in the Institutional Conservation Program mentioned above since 1983, at which time it was awarded its first grant for a Technical Assistance Report ("TA"). Since the first grant, the Hospital has aggressively addressed

energy conservation, both with the use of grants and on its own.

A history of the 4 grants awarded to the Hospital over this time frame is illustrated in Figure 1. In general, the Hospital received 1 grant for Technical Assistance (based on 283,880 square feet), and 3 grants for Energy Conservation Measures ("ECM's") identified in the original Technical Assistance Report.

The Energy Conservation Measure funding was applied for in 3 separate Cycles, due to the limited amount of funding available from DOE and the Louisiana Department of Natural Resources ("DNR") during the applicable Cycles.

- | | |
|---------------------------------|-----------------|
| • 1983 Grant: \$57,600 | LGMC Share: 50% |
| Technical Assistance Report | |
| • 1985 Grant: \$83,740 | LGMC Share: 50% |
| Reheat Coils and VFD on Pumps | |
| • 1986 Grant: \$120,000 | LGMC Share: 50% |
| VFD on HW Pump and Rezone AHU's | |
| • 1988 Grant: \$170,548 | LGMC Share: 40% |
| Reheat Coils and VFD on Pumps | |

Figure 1. LGMC Recap of Completed ICP Grants.

The TA also identified several Maintenance and Operation ("M&O") procedures, all with a simple payback of less than 1 year. These M&O's were required to be completed by the Hospital prior to receiving funding for the ECM's funded.

The combination of the Preventive Maintenance Program and the implementing of M&O's worked well together, enabling the Hospital to identify numerous other opportunities to decrease utility expense within the operations of equipment and plant systems.

Since the first Technical Assistance Report was prepared, the Hospital has realized a cumulative savings in excess of \$5.6 million dollars.

BACKGROUND OF CHILLER PROJECT

Reason for the Project

In 1994, during the Hospital's capital budget process, the Maintenance & Operation Department

budgeted for the replacement of 3 of the 4 chillers. The Hospital had been monitoring the CFC issue for the past several years, and felt it was time to begin replacing its 30 year old machines. The Hospital's original plan at the time of budgeting was a one-for-one replacement of chillers with like, higher efficiency chillers.

The money was approved in the budget; however, with the remainder of the central plant also at 30 years of age, there were other major pieces of equipment, such as the boilers, auxiliary generators and other HVAC equipment for which the Hospital knew they needed to begin replacement. Therefore, the Hospital began to re-look at the original chiller project to determine if it had any other alternatives to finance these projects other than its own capital money.

Financing Options Reviewed

The Hospital had been contacted by a few companies in the past to look at Performance Contracting, and after reviewing a few options, it felt this was not the best option at the time. The Hospital decided to look instead at the DOE/DNR program once again, to determine if it was possible to fund the change out of major pieces of plant equipment.

The Hospital contacted two engineering firms to review and perform some preliminary engineering to determine if this was a viable option. The preliminary information was very favorable. Based on a combination of new technology available since the original 1983 TA and the additional square footage, the Hospital decided to postpone the original chiller replacement project long enough to determine if indeed it would qualify for matching funds.

After research and due to the prior success with the ICP funding program, Lafayette General Medical Center decided to pursue a 5th grant to possibly finance a portion of the chiller replacement in order to free other funds for replacement of the other equipment in the Hospital.

The first step in this process was the preparation of a Technical Assistance Report for submission to the Department of Energy and the Louisiana Department of Natural Resources. The Hospital used some of the funds budgeted for the original chiller project to have another Technical Assistance Report prepared for the

facility. The energy audit was performed by Poche' Associates, Ltd., and was completed in 1995.

THE NEW TECHNICAL ASSISTANCE REPORT

A new TA Report was prepared and resulted in several innovative Energy Conservation Measures to solve the chiller situation, in addition to a major lighting retrofit project.

METHODOLOGY

The Technical Assistance Report format required in order to participate in the Institutional Conservation Program funding process, involves a rigid protocol to be followed.

In general, the analysis involved:

- Analysis of 12 month utility history and rates.
- Inventory of energy-consuming devices.
- Simulation of facility to match existing utilities.
- Analysis of any appropriate M&O's and ECM's.
- Recommendation of M&O's and ECM's.

During the data gathering phase, the analysis team visited a similar Hospital plant in Ohio, which had recently converted to a gas-fired chiller in their chiller replacement program.

The analysis phase also included negotiating rates with the electric and gas companies servicing the Hospital.

The utility history and equipment inventory was performed utilizing a spreadsheet, while the computer simulation was created utilizing DOE 2.1D Building Energy Analysis Software.

Description of Plant Before Replacement

The Central Cooling Plant and Distribution System consists of 4 water cooled, centrifugal chillers and 5 cooling towers. Chillers #1 and #2 utilized Cooling Towers #1, #2 and #3. Chiller #3 operated with Cooling Tower #4, and Chiller #4 operated with Cooling Tower #5.

The chillers were staged based on the cooling load in the Hospital, generally by maintaining a

fixed chilled water return temperature. The Hospital uses manual shedding of the chillers. The chiller capacities are noted below:

- Chiller #1 - 435 tons
 - Chiller #2 - 435 tons
 - Chiller #3 - 230 tons
 - Chiller #4 - 700 tons
- Total: 1800 tons

The Central Heating Plant (including domestic hot water) utilized 2 12-million BTUH input central boilers which produce steam. Steam is used for:

- Numerous steam domestic hot water generators (temperature set at approx. 120°).
- Sterilizers.
- Kitchen equipment.
- Preheat for outdoor air.
- 2 building heating hot water heat exchangers.

The hot water from the heat exchangers is then circulated to all air handlers and reheat coils.

At the time of the first TA Report, faulty steam traps were a major problem of losses. Since that time, the Hospital has aggressively corrected the problem, to the extent of checking the temperature differential across steam coils and setting a regular schedule for a steam trap maintenance program.

For its Air and Water Distribution System, the Hospital utilizes a wide range of primary air handling systems, including central station air handlers and main cooling supply ducts with hot water reheat; single-zone units with heating and cooling in the air handler; variable volume air handlers with fan powered terminal boxes with hot water heating in the terminal boxes; central station air handlers for Patient Rooms with pre-heat, cooling, reheat and re-cool at terminal induction boxes; and other miscellaneous units.

The water distribution system for the building hot water heating and chilled water, both utilize variable flow pumping and control on the secondary side of a chilled water/header loop. The primary pumping for each chiller is utilized in a staged fashion in order to provide chilled water flow to the loop.

Maintenance & Operation Procedures Identified

The original TA Report had identified the following Maintenance & Operation Procedures, which are still being followed:

- Reduce air handler runtime on several air handlers when areas are unoccupied.
- Refurbish steam traps.
- Turn Kitchen lights off when unoccupied.
- Delamp certain overlit areas.
- Tune/control boiler.
- Reduce outdoor air intake.

The Hospital initiated the following Maintenance & Operation Procedures on their own after the original TA Report:

- Extensive and aggressive Preventive Maintenance Program.
- Detailed tracking of utilities to monitor consumption patterns.
- Steam system maintenance by checking the temperature differential across the steam coils.

The new TA Report identified the following Maintenance & Operation Procedures:

- Reduce air flow on air handler unit (heat producing equipment was removed from air handler zone).
- Maintain constant 44° chilled water supply temperature. (This allows the variable frequency drives on the secondary pumps to throttle down lower. The chillers had been staged based on return water temperature).

Energy Conservation Measures Investigated

The original TA Report had identified the following ECM's which were installed prior to this analysis:

- Replace 80 reheat coils to permit use of reset.
- Install variable frequency drive on 15 hp hot water circulating pump, controlled to maintain a return temperature that is reset against critical zone temperature.
- Rezone 2 AHU's in order to allow the Administrative areas to be turned off after regular business hours.

The Hospital completed the following ECM's on its own after the original TA Report:

- Replacement of most incandescent lamps and fixtures with screw-in type fluorescent lamps or new fluorescent fixtures.
- Replacement of F40 fluorescent lamps with F34 lamps.
- Partial replacement of standard magnetic fluorescent ballasts with high-efficiency models.
- Replacement of 4 domestic hot water storage type water heaters with instantaneous heaters.
- Expansion of Landis & Staefa Energy Management System to control most of the air handler units, converting from pneumatic to DDC.
- Retrofitted Patient Room overhead exam lighting with new fixtures which consume basically same as old fixture but provide much needed higher footcandle levels.
- Installed variable frequency drives on 2 reheat pumps.
- Replaced 2 domestic hot water heater storage tanks.
- Installed variable frequency drives on 50 hp CW pump serving original building branch, 25 hp CW pump serving Surgery and 75 hp CW pump serving branches.
- Installed time clocks on certain areas to control lighting.

The new TA Report investigated many Energy Conservation Measures. In all, 17 ECM's were initially considered. ECM's #1 through #4 (ECM's not involved with the Central Plant) were analyzed in detail, found to be eligible for funding and recommended. The implementation status is noted below for each:

ECM #1: Refurbish Lighting < 2 Years.

Status: Although not eligible for funding, the Hospital saw the merit in this ECM and completed the project with their own funds.

\$38,301 Project Budget

\$20,110 Annual Savings = 1.9 year payback

ECM #2: Refurbish Lighting 2 to 10 Years.

Status: This ECM was funded and installed.

\$199,589 Project Budget

\$33,774 Annual Savings = 5.9 year payback

ECM #3: Reduce Air Flow.

Reduction was made possible as a result of reduced sensible cooling load associated with implementation of Lighting ECM's 1 and 2.

Status: This ECM was determined eligible.

However, due to a limited amount of funds available in the Cycle, this ECM was not applied for. The Hospital is considering implementing this ECM with their own resources.

\$98,000 Project Budget

\$31,007 Annual Savings = 3.2 year payback

ECM #4: Patient Room Reset.

Included resetting supply air temperature based on a sensor in the Patient Room. The new thermostat would control re-cool coil in induction boxes. Humidity would also be monitored in exhaust from Patient Rooms.

Status: This ECM was determined eligible.

However, due to a limited amount of funds available in the Cycle, this ECM was not applied for. The Hospital is considering implementing this ECM with their own resources.

\$409,400 Project Budget

\$59,915 Annual Savings = 6.8 year payback

ECM's #5 through #8 were the different chiller options considered. The initial considerations were given to:

- All centrifugal plant.
- All gas plant.
- Combination gas and electric ("hybrid") plant.

In all, 4 combination options were considered. One of the goals was to eliminate the unbalanced tonnage of the individual chillers (2 @450, 1 @700 and 1 @230). With the reduced load on the buildings as a result of previous

ECM's implemented and future ECM's to be implemented, the maximum cooling load could be reduced to approximately 1400 tons. In the event of loss of the original 700 ton chiller, the chilled water plant did not have sufficient capacity to support the Hospital during peak conditions for an extended period of time.

Therefore, all 4 chiller ECM's recommended replacements in increments of 500 tons each. As a result, any combination of any 3 chillers provided the total building load at peak conditions.

Another objective of the chiller analysis was the comparison of high efficiency electric chillers versus the available gas technology chillers.

It was at this point of the analysis that both the electric and gas utilities were contacted for possible rate consideration. With electric rates averaging 5.6 cents/kwh (including demand), the current gas rates would not be able to compete. As a result of negotiations, the gas company, with the approval of the Louisiana Public Service Commission, established a new rate for hospitals, which provides a special rate for gas utilized for cooling. The rate reduction was from \$5.31/MCF to \$3.25/MCF (rates current at time of the TA Report; actual cost varies monthly, depending on fuel adjustment charges).

ECM #5: Centrifugal Retrofit.

This ECM analyzed replacement of 3 centrifugal chillers with 3 higher efficiency centrifugal chillers. The 230 ton (1.03 kw/ton) chiller and the (2) 435 ton (.84 kw/ton) chillers would be replaced with (3) 500 ton (.58 kw/ton) chillers. This ECM would allow the remaining 700 ton chiller to remain as a "standby" chiller.

\$725,200 Project Budget

\$76,051 Annual Savings = 9.5 year payback

ECM #6: Chiller/heater Retrofit.

This ECM investigated the replacement of (1) 450 ton centrifugal chiller (.84 kw/ton) with (1) new 500 ton centrifugal chiller (.58 kw/ton), plus the replacement of the second 450 ton chiller (.84 kw/ton) with 1 new 500 ton direct-fired chiller/heater. The 700 ton and 230 ton chillers

would remain, with the 230 ton unit reserved as the last chiller to be brought alive.

\$761,580 Project Budget

\$82,925 Annual Savings = 9.2 year payback

ECM #7: Engine Driven Chiller.

This ECM is dependent upon ECM #6 being implemented. The configuration of chiller replacement would be revised slightly, as follows:

- 1 new 500 ton Centrifugal Chiller.
- 1 new 500 ton Chiller/heater.
- 1 new 500 ton Engine-Driven Chiller.
- 1 existing 435 ton Centrifugal Chiller to remain (includes new pumps and cooling tower).

This ECM also provides waste heat recovery to supplement the building heating system.

\$622,227 Project Budget

\$94,239 Annual Savings = 6.6 year payback

ECM #8: Gas & Electric Chillers + Generator.

This ECM is basically the same as ECM #7, except that in lieu of the new 500 ton engine-driven chiller, replacement would be 1 absorption chiller supplied with waste heat from a generator.

\$2,030,560 Project Budget

\$235,131 Annual Savings = 8.6 year payback

Based on several different factors, the recommendation was made for ECM's #6 and #7. The reasons and benefits for the decision were based on:

- The chiller/heater technology allows for simultaneous heating and cooling on the lower gas rate because it provides cooling during the summer.
- The chiller/heater delivers higher temperature hot water (approximately 175°F), which is utilized in the Hospital's reheat system.
- The chiller/heater has eliminated some of the redundancy of equipment by utilizing this piece of equipment as a backup for the heating system.

- With the centrifugal chiller performing at a lower kw/ton, the combination of all new chillers have dramatically reduced the overall electric consumption and kw demand load for the building.

The gas chillers have reduced the requirement for emergency load by the generator by being able to provide gas cooling. Prior to this project, the generators were able to supply required building loads and one 500 ton chiller. Now, during electric outages, the generator is used for a significant portion of the building load and the gas chillers provide 1,000 tons of cooling.

In addition, the steam requirements from the steam boilers will have decreased by half as a result of allowing the future replacement of boilers to be installed in smaller capacities and smaller sizes, which frees up much needed space in the mechanical room.

Lastly, with a hybrid system, fluctuation of energy prices between the different utility sources allows the Hospital the flexibility of utilizing competitive energy.

Projected energy savings of \$211,000 per year was also a determining factor.

Although ECM #8 also had an impressive savings and payback period, the difference in initial investment was a deterrent. In addition, implementation of this option left the potential for the electric company to impose a "standby charge", which is not in the present rate structure.

ECM's #9 through #11 identified ECM's which were ineligible either because they exceeded the 10 year payback period or were for ineligible areas of the Hospital (areas built after 1989) or areas not attached to the building.

ECM #9: Lighting with a Payback > 10 Years.
Status: Not eligible.

ECM #10: Lighting in the Parking Garage.
Status: Area not eligible.

ECM #11: Chiller Plant Retrofit-Ineligible Areas.
Status: Although not eligible for funding, these

areas were included in the installed project.

ECM's #12 through #17 were initially considered but removed from the list of potential ECM's for the reasons noted below:

ECM #12: Replace Kitchen Hood.

A preliminary investigation of this ECM indicated only approximately \$5,000 savings for replacement of the 3 hoods. Since the project would exceed \$50,000, the payback would exceed the 10 year payback limit.

Status: Not recommended.

ECM #13: Film on Windows.

Due to the orientation of the building, the "fins" created from the different angled wings and the overhang at each floor, the savings would not be substantial enough to warrant installation.

Status: Not recommended

ECM #14: Dismantle Steam Plant.

Due to the extent of steam equipment and piping throughout the Hospital, the cost would be prohibitive, not to mention the asbestos abatement required for such an undertaking.

Status: Not recommended

ECM #15: Installation of Desiccant Equipment.

An initial review of this measure indicated an up-front cost that would exceed a 10 year payback, in addition to the space requirements for an installation of that type.

Status: Not recommended

ECM #16: Reclaim Stack Heat.

Due to the amount of asbestos associated with the implementation of this measure, the cost would be prohibitive.

Status: Not recommended.

ECM #17: Reclaim Flash Heat.

Due to the amount of asbestos associated with the implementation of this measure, the cost would be prohibitive.

Status: Not recommended.

Summary of Technical Assistance Report

The TA Report as submitted projected impressive results. The final recommended ECM's were:

- ECM #2: Refurbish Lights 2-10 Years.
- ECM #3: Air Balance.
- ECM #4: Patient Room Reset.
- ECM #6: Chiller/heater Retrofit.
- ECM #7: Engine-Driven Chiller Retrofit.

The projected results if the recommended Maintenance & Operation Procedures and Energy Conservation Measures are implemented are summarized in Figure 2 below:

	BTU/SF YR	Annual Cost/ Savings	Cost/ SF	% of Base
Base Year	576,206	\$ 1,275,534	\$ 2.86	100.0%
O&M Svgs.	(4,862)	\$ (9,255)	\$ (0.02)	- 0.7%
ECM Svgs.	(96,414)	\$ (301,860)	\$ (0.68)	-23.7%
Total Svgs.	(101,276)	\$ (311,115)	\$ (0.70)	-24.4%
Projected	474,930	\$ 964,419	\$ 2.16	75.6%

Figure 2. TA Report Projected Results.

THE FUNDING PROCESS

The completed TA Report was submitted to DNR for approval in June of 1995 and subsequently received approval. However, there was not another Funding Cycle until January of 1996 and the Hospital was very anxious to begin the chiller changeout.

In order to expedite the procedure, the Hospital chose to utilize "ECM Credit", by which an approved ECM is installed with the Owner paying all costs and when a grant application is made, their costs are used as a match in the grant for the remaining ECM's.

Using this logic, the Hospital immediately proceeded with installation of ECM #6 (Chiller/heater Retrofit). Installation of this ECM was complete by early 1996.

In January of 1996, the Hospital submitted its application for ECM #2 and ECM #7. It chose to wait on ECM's #3 and #4 due to time restraints and a possible limit on funds available from the Department of Natural Resources.

The grant was subsequently awarded in January of 1997, with the Department of Natural Resources agreeing to pay for most of the costs associated with ECM's #2 and #7.

THE DESIGN AND INSTALLATION

As mentioned in the previous section, ECM #6 (Chiller/heater Retrofit) was designed and installed in Phase 1. Phase 2 was started immediately upon award of the grant, since the Department of Natural Resources had assigned completion deadline to the grant work of September, 1997 (9 months). Phase 2 included the lighting ECM, the engine-drive chiller, and various pumps and cooling towers.

Refer to Figure 3 through Figure 8 for diagrams of the system before replacement and the new plant configuration.

GRANT RECAP

The current grant was the 5th grant awarded to the Hospital through the Institutional Conservation Program. A recap of the Hospital's grants to date is provided in Figure 9.

1997 Grant:	LGMC Share: 50.0%
TA for New SF	\$ 33,908 (credit)
Chiller/heater	\$ 726,693 (credit)
Lighting	\$ 199,589
Engine-Driven Chiller	\$ 622,227
	\$1,582,417
Total/4 Previous Grants	\$ 431,888
Total/All Grants	\$2,014,305
LGMC Share	\$ 990,098 (49.2%)

Figure 9. Recap of 5 ICP Grants.

OVERALL EFFECT OF THE GRANT AND ENERGY PROGRAM

With the latest grant freeing-up funds previously dedicated to replacement of the chiller, the construction

project was able to include the replacement of an additional cooling tower, additional pumps and variable frequency drives.

The ECM's also addressed the problem of replacing the aging equipment, as well as the CFC issue.

The Hospital has freed enough funds to replace their 4th remaining chiller with a 500 ton single-speed centrifugal chiller with their own funds. This project should be complete by the summer of 1998.

Overall results of the Hospital's continuing efforts can be summarized graphically. Figure 10 reflects the Hospital building growth since 1983, from 284,000 square feet to the present 463,000 square feet.

Figure 11 illustrates the declining BTU/SF/Year evidenced over the same time frame as summarized below:

1983 BTU/Sq Ft/Yr	754,753
1997 BTU/Sq Ft/Yr	505,648 (33% reduction)

In Figure 12, the savings on a Cost/Square Foot basis declines even more dramatically than in the BTU/SF/YR graph. This is due to the new gas rate which allows for "cheaper" BTUH's. A comparison from the base year to the present is :

1983 Cost/Square Foot	\$3.94
1997 Cost/Square Foot	\$2.26

Cumulative savings from their benchmark year of 1983 have exceeded \$5.6 million.

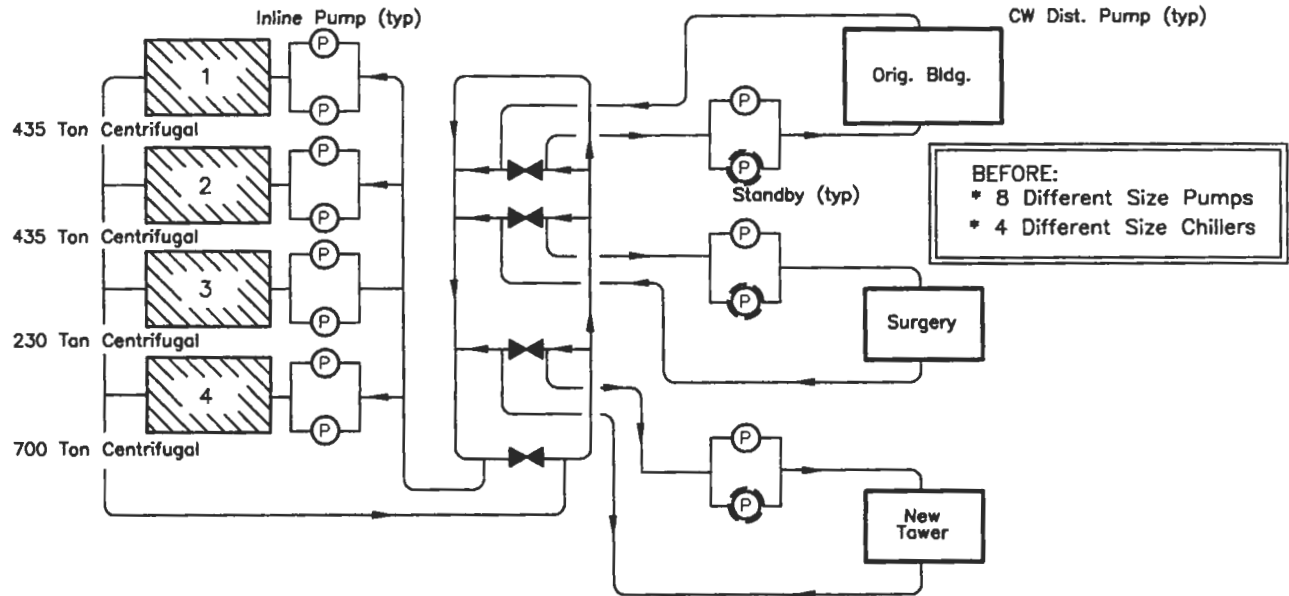


Figure 3. Chilled Water Primary and Secondary Loop - BEFORE

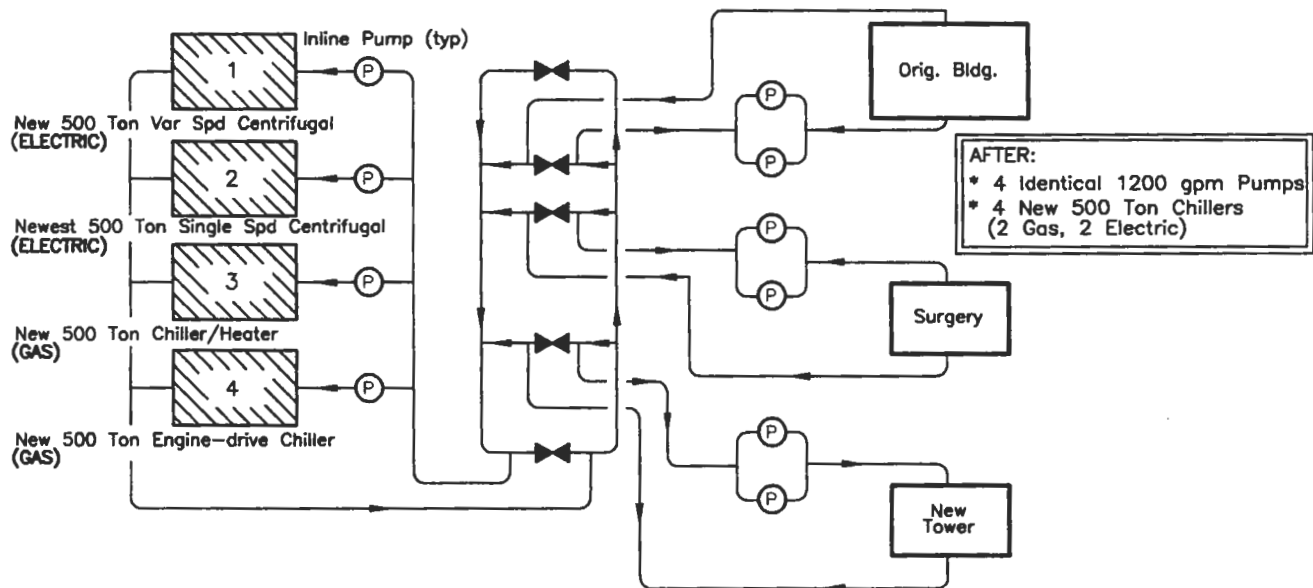


Figure 4. Chilled Water Primary and Secondary Loop - AFTER

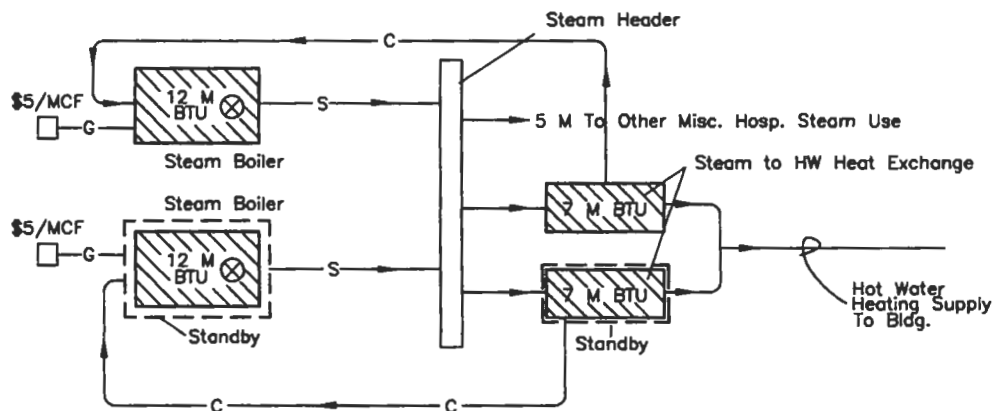


Figure 5. Steam/Hot Water Piping Diagram - BEFORE

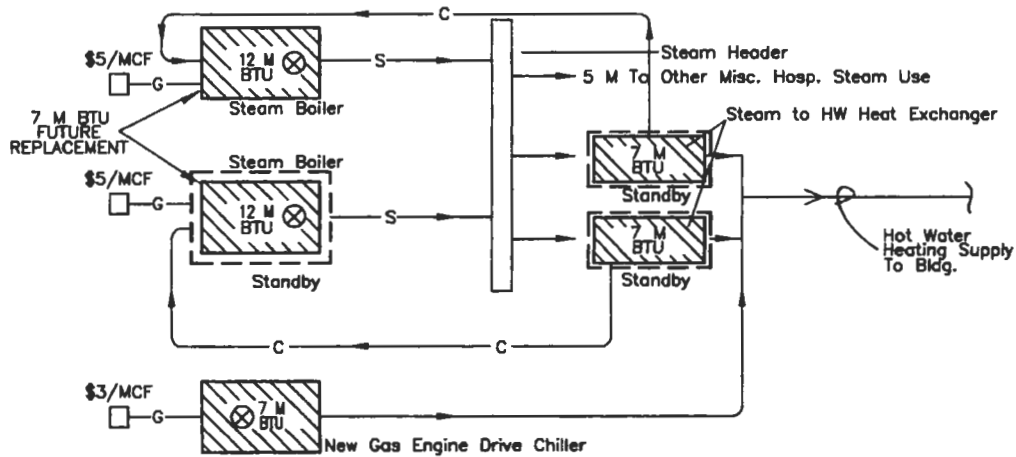


Figure 6. Steam/Hot Water Piping Diagram - AFTER

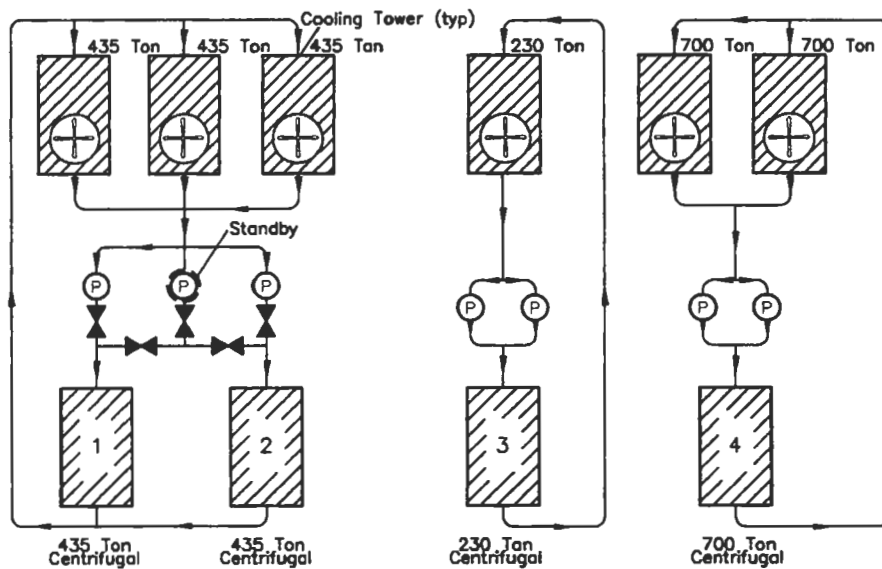


Figure 7. Chiller/Cooling Tower Piping Diagram - BEFORE

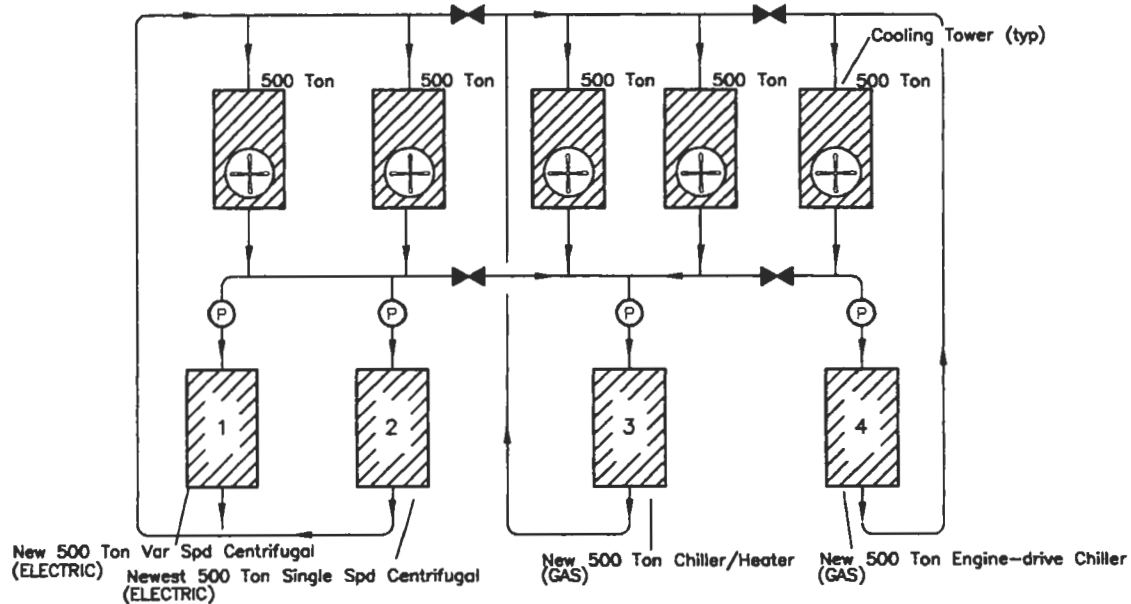


Figure 8. Chiller/Cooling Tower Piping Diagram - AFTER

Square Footage

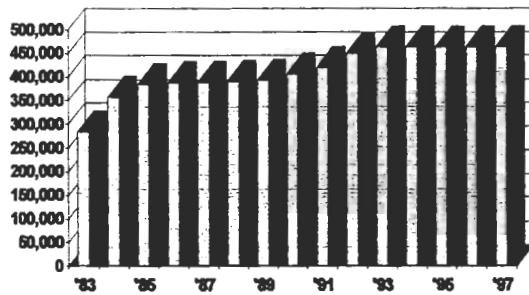


Figure 10. LGM Growth

BTU/Square Foot/Year

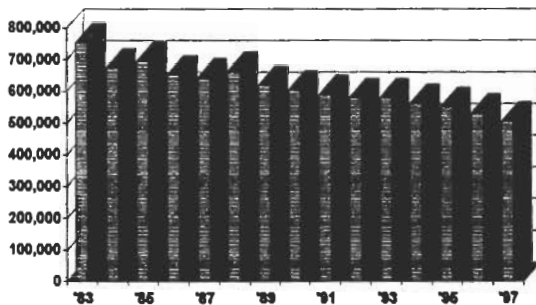


Figure 11. LGM Consumption Levels

Cost Per Square Foot

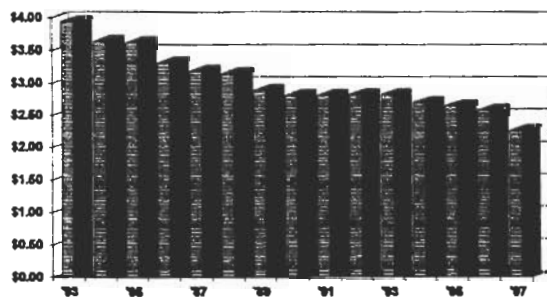


Figure 12. LGM Cost Per Square Foot

RECOGNITION RECEIVED

As a result of their initiative and efforts, the Hospital was featured in the May, 1993 ICP publication entitled *ICP Success Stories - State Report Briefs*. The State of Louisiana was looking for an institution that had participated in the ICP and had good success with it. The Louisiana Department of Natural Resources requested the Hospital's success story be submitted to the Department of Energy for publication. The Hospital was subsequently selected and published.

The Hospital is currently being considered by DNR to be submitted again to DOE for the same upcoming publication.

This past November, 1997, the Hospital was awarded the Energy User's News Healthcare Facility Certificate of Merit in the Efficient Building Award competition.

The Hospital was also featured in the Winter 1997 Edition of *Visions* (Quarterly magazine for ATMOS Energy Corporation). In addition, the Hospital has been nominated for the Association of Energy Engineers Project of the Year and the Plant Services Manager, Kenneth Credeur, has been nominated for Energy Manager of the Year.

Lafayette General Medical Center is truly to be congratulated on its vision, initiative and continuing efforts.